2. If the refill sale of the existing distributor exceeds the prescribed norms of ceiling applicable to the market subject to adequate potential available or sustaining an economically viable second unit.

(b) At present, LPG distributorships are opened in towns having a population of 20,000 and above subject to economic viability and product availability. Keeping in view the expected increase in availability of product and the demand from the smaller towns, it has been decided by the Government to extend LPG marketing to other towns by extending the area of operation to the adjoing villages. Potential of the adjoining villages. will also be taken into consideration for planning the LPG distributorships. Due to product a constraint, it is not possible to supply LPG at Panchayat level at present.

Technologies developed by ONGC for Petroleum Products

8046. G. Y. KRISHNAN: Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

(a) what are the names and the details of products for which the ONGC ha* developed technologies in its R&D Centres, either itself or in collaboration with other research institutions, for captive consumption or for general use, serialwise;

(b) whether the ONGC has transferred the technical know how of the products referred to in part (a) above to the enterpreneurs/organisations, for commercialisation; if so, what are the details thereof, product-wise; and

(c)what are the names of the products for which technology is yet to be transferred for commercialisation by ONGC and their annual requirement?

THE MINISTER OF STATE OF THE MINISTRY OF PETROLEUM AND NATURAL GAS (CAPT. SATISH SHARMA): (a) ONGC has not developed any technology for petroleum pro-dusts.

However, the following Chemicals] Drilling Fluids and Cement additives have been developed by the two R&D Institutes viz. Keshava Deva Malaviya Institute of Petroleum Exploration (KDMIPE) & Institute of Drilling Technology (IDT) of ONGC:

KDMIPE:

KDMIPE has developed the following Chemicals in collaboration with the other National Institutes:

(i) Hydroxy Propyl Guargum (H.P. Guargum) developed in collaboration with IIT, New Delhi.

(ii) Welding Technology for fabrication of all welded heavy duty wire Wrapped Screen Liners developed in collaboration with IIT, New Delhi.

(iii) Sintered Bauxite, high strength proppants developed in Laboratory scale in collaboration with RRL, Jorhat.

(iv) Software packages for interpretation and evaluation of well log data in house:

1. Essential Utility Softwares.

2. Graphic Packages (LDDF).

3. Advanced interpretation Softwares (Logproc; Daisy, Swan, ELF Fresan).

4. Software "Toccal" for source rock evaluation.

IDT:

Following Drilling Fluids and Cement additives, used in Oil well drilling and Cementing Operations, have been developed by IDT:

1. Ferrochrome Ligno sulphonate.

2. Chromefree Lignosulphonate.

3. HT Fluidloss Control additive.

4. Organophilic Lignite.

5. HT Fluidloss IDEX-1.

6. Organophilic Clay,

7. Sulphomethylated cutch.

8. DP Lubricant water base.

9. Thread Dope.

10. OTT-1 Turbulence Inducer.

11. OFL-1 Fluidloss additive.

12. Oil well cement.

13. Low Temperature Retarder.

14. Slag Cement.

15. Multi-purpose cement additive (MPCA).

16. High Temp. Fluidloss additive (IDPX-2).

(b)

KDMIPE:

—For H.P. Guarguro, the firms for technological know— how transfer and commercialisation are;

(i) Hindustan Gum & Chemicals Ltd Bhivani.

(ii) C.I. Laboratory, Calcutta.

—For Sintered Bauxite, high strength proppants, process for filling of patent has been completed.

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—Efforts are being made to transfer/ market the software for commercialisation.

IDT.

As on date the following technologies referred to in part (a) above have been transferred to enterpreneurs/organisations:

1. HT fluid loss IDEX-1 to M/s Kalpana Chemicals, Hyderabad and Rajat Chemicals, Lucknow, of which M/s Kalpana Chemicals is a regular sup plier of the item to ONGC. M/s Rajat Chemicals Lucknow did not follow uP.

2. Up-luba water-base technology given to M/s Usha Pvt. Ltd., Calcutta and M/s Usha Paints and Lubricants, Calcutta, each of which has executed an order for 50 drums each.

3. OTI-1 Turbulence Inducer—the technology far this additive has been transferred to the following:

1. M/s Nutan Orgachem, Ahmedabad ,

2. M/s Hindustan Gums, Bhivani

3. M/s High Explosive, Ltd., Kirkee

Of these only M/s Nutan Orgachem is supplying material to ONGC on date.

4. Multipurpose Cement-Additive-M/s Nutan Orgachem, Ahmedabad have obtained this know-how from IDT on date and have already execu ted an order for 2.0 MT which has since under gone field trails in KG Project, ONGC.

5. TDPX-2 the technology for this additive has been taken by M/s Rishabh Metals and Chemicals, Bom bay but they have not been able to scale up the same till date.

(c) For the following additives the technology has not *been* transferred for reasons given against each item:

KDMIPE:

The technology transfer for commercialisation for Sintered Bauxite, high, strength proppants,, is yet to be done, Procurement of this item is done on need basis and, therefore, no annual requirement can be specified.

IDT :

S.No.	Product	Requirement (MTPA)	Reasons
1.	Feerochrome lignosulphonate or	2000	Independent technology is avaialble for chrome lignosulphonate, same company making efforts to develop the item.
2.	Chrome free lignosulphonate	..	
3.	HT fluid loss control additive	700	Independent source also exists.
4.	Organophillic Lignite	..	Poor occasional requirement.
5.	Organophillic clay	..	Poor occasional requirement.
6.	Sulphomethylated cutch	..	Poor occasional requirement.
7.	Thread Dope	50	Indepedent sources also exist.
8.	OFL-1 Fluid loss additive	200	Technology has undergone change.
9.	Oil Well cement	90,000	Independent multiple sources exist.
10.	Slag cement	..	Inconsistent application – not used in India so far.
11.	Low Temp. retarder	..	Dropped due to technological change.

Alternative of Cooking Gas

8047. SHRI J. S. RAJU:

SHRI MISA R. GANESAN:

Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

(a) what is the total requirement of Natural Gas in the country;

(b) what is the total availability in all the gas producing companies;

(c) what is the next alternative to gas for cooking purposes, to meet tin demand; and

(d) how far the sun light would be able to meet the demand of the people?

THE MINISTER OF STATE OF THE MINISTRY OF PETROLEUM AND NATURAL GAS (CAPT. SATISH SHARMA): (a) and (b) The requirement of gas from units which have been allocated gas is likely to be around 75 MMSCMD in the curreut year as against the effected production of around 62 MMSCMD.